

Amendments to the Claims

This list of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A switch fabric network for routing packets, wherein each of said packets comprise packet field data, comprising: a switch having a plurality of ports, wherein said switch receives a packet on one of said plurality of ports, and based solely only on said packet field data and the number of said ports, transmits said packet on a second one of said plurality of ports.

Claim 2 (currently amended):-~~A system of claim 1 wherein A switch fabric network for routing packets, wherein each of said packets comprise packet field data, said packet field data comprising a turn pool, wherein said turn pool comprises a plurality of turn values, and a turn value indicates the position of said a second port relative to said a first port, said network comprising: a switch having a plurality of ports, wherein said switch receives a packet on said first port of said plurality of ports, and based on said packet field data and the number of said ports, transmits said packet on a said second port of said plurality of ports.~~

Claim 3 (cancelled)

Claim 4 (currently amended): A system of claim ~~1~~ 2 wherein said packet field data is comprised of a credit length, a

bit count, a ~~turn pool~~, an operation, a Path Identifier (PID) index, a Maximum Transmission Unit (MTU) and an Extended Unique Identifier (EUI).

Claims 5-12 (cancelled)

Claim 13 (previously presented): The system of claim 2 wherein said packet field data further comprises a bit count.

Claim 14 (currently amended): A switch for routing a packet, wherein said packet comprises packet field data, comprising:

a plurality of ports;
means for receiving said packet on a first of said ports;
means for determining ~~the appropriate~~ a second port on which to transmit said received packet, using only said packet field data and the number of said ports;
and

means for transmitting said packet on said ~~determined appropriate~~ second port.

Claim 15 (currently amended): ~~The switch of claim 14,~~
~~wherein~~ A switch for routing a packet, wherein said packet comprises packet field data, said packet field data comprising a turn pool, wherein said turn pool comprises a plurality of turn values, and a turn value indicates the position of ~~said determined~~ a second port relative to ~~said~~ a first port, said switch comprising:

a plurality of ports;

means for receiving said packet on said first port of
said plurality of ports;
means for determining said second port on which to
transmit said received packet, using said packet field
data and the number of said ports; and
means for transmitting said packet on said second
port, where said determining means utilizes said turn
pool to select said appropriate second port.

Claim 16 (currently amended) : The switch of claim 15, wherein said packet field data further comprises a bit count and said determining means utilizes said bit count to select said appropriate second port.

Claim 17 (currently amended) : The switch of claim ~~14~~ 15, further comprising means to modify said packet field data prior to transmitting said packet.

Claim 18 (currently amended) : A method of routing a packet from a source to a destination within a fabric having at least one switch, said switch having a plurality of ports, said method comprising:

encapsulating said packet with a header, wherein said header comprising packet field data;
transmitting said encapsulated packet from said source to said switch;
receiving said encapsulated packet by said switch on a first of said ports;
determining ~~an appropriate output~~ a second port using only said packet field data and the number of said ports; and

transmitting said encapsulated packet from said switch via said appropriate second output port.

Claim 19 (currently amended) : The method of claim 18 further comprising modifying said packet field data prior to transmitting via said appropriate output second port.

Claim 20 (currently amended) : The method of claim 18,
whereby A method of routing a packet from a source to a
destination within a fabric having at least one switch,
said switch having a plurality of ports, said method
comprising:

encapsulating said packet with a header, wherein said
header comprises packet field data, said packet field
data comprises comprising a turn pool, wherein said
turn pool comprises a plurality of turn values, and a
turn value indicates the position of said appropriate
output a second port relative to said a first port;
transmitting said encapsulated packet from said source
to said switch;
receiving said encapsulated packet by said switch on a
said first port of said plurality of ports;
determining said second port using said packet field
data and the number of said ports; and
transmitting said encapsulated packet from said switch via
said second port.

Claim 21 (previously presented) : The method of claim 20 whereby said packet field data further comprises a bit count.

Claim 22 (currently amended) : The method of claim ~~19~~
~~whereby said packet field data comprises a turn pool,~~
~~wherein said turn pool comprises a plurality of turn~~
~~values, and a turn value indicates the position of said~~
~~appropriate output port relative to said first port 20~~
further comprising modifying said packet field data prior
to transmitting via said second port.

Claim 23 (previously presented) : The method of claim 22
whereby said packet field data further comprises a bit
count.

Claim 24 (currently amended) : The method of claim ~~18~~ 20,
wherein said fabric comprises a plurality of switches, and
said method further comprises repeating said receiving,
determining and transmitting steps until said packet
reaches said destination.

Claim 25 (previously presented) : The method of claim 21,
further comprising using said turn pool and bit count of
said packet received by said destination to create a second
header, used by said destination, to encapsulate a second
packet to be routed from said destination to said source.

Claim 26 (previously presented) : The method of claim 23,
further comprising using said turn pool and bit count of
said packet received by said destination to create a second
header, used by said destination, to encapsulate a second
packet to be routed from said destination to said source.